

IN THE CLAIMS

A listing of all claims and their current status in accordance with 37 C.F.R. § 1.121(c) is provided below.

1. (Currently Amended) A fluid warming and infusion system for infusing a warm fluid into a patient, comprising:

a device ~~that~~configured to transfer[[s]] heat to ~~the~~a fluid, ~~thereby warming to~~ warm the fluid; and

~~an insulated~~a tube having insulation integrated into the tube, the tube being that~~configured~~to be disposed external to the patient and to transport[[s]] the warmed fluid to the patient; ~~wherein the insulated tube includes a substantially thermally insulating component that to~~ prevent[[s]] the warmed fluid from losing a substantial amount of heat as the fluid flows through the tube, wherein the tube is configured to attach to a patient insertion device disposed in the patient.

2. (Currently Amended) The fluid warming and infusion system of claim 1, wherein the ~~insulated tube~~ comprises ~~has a configuration selected from the group consisting of:~~

A)——an outer wall, an inner wall, and a fluid lumen, wherein an annular insulating gap is positioned between the outer wall and the inner wall, and ~~[[a]]~~wherein the fluid lumen is formed by the inner wall for transporting the warmed fluid.

B)——~~an outer wall, an inner wall that forms a fluid lumen for transporting the warmed fluid, and at least two partitions connected between the inner and outer walls for forming at least two insulating gaps between the inner and outer walls; and~~

~~C) a single wall configuration wherein a plurality of insulating cavities exist within the wall.~~

3. (Currently Amended) The fluid warming and infusion system of claim 2, wherein each the annular insulating gap ~~or each of said cavities~~ is evacuated and sealed so that a vacuum is created in the annular insulating gap(s) ~~or cavities~~.

4. (Currently Amended) The fluid warming and infusion system of claim 2, wherein each the annular insulating gap ~~or each of said cavities~~ is filled with an insulating material.

5. (Original) The fluid warming and infusion system of claim 4, wherein the insulating material is comprised primarily of air.

6. (Original) The fluid warming and infusion system of claim 4, wherein the insulating material comprises insulating foam.

7. (Currently Amended) The fluid warming and infusion system of claim 25[[2]], wherein there are only two partitions and the partitions are spaced about 180 degrees apart from each other.

8[[9]]. (Currently Amended) The fluid warming and infusion system of claim 1, wherein ~~said~~ the device is comprises a heat exchanger cassette.

910. (Currently Amended) The fluid warming and infusion system of claim 1, wherein ~~said the device is~~ comprises a fluid warmer.

1011. (Currently Amended) The fluid warming and infusion system of claim 1, ~~further~~ comprising a luer connector attached to a distal end of ~~said the insulated~~ tube.

1112. (Currently Amended) A method for infusing a warmed fluid into a patient ~~utilizing the fluid warming and infusion system of claim 1~~, comprising:

warming a fluid;

passing the warmed fluid through a step of providing an insulated a tube having insulation integral to the tube, the tube being disposed external to the patient and being configured to transport patient line comprising a tube for delivering the warmed fluid to the patient, wherein the tube includes a substantially thermally insulating component that to prevent[[s]] the warmed fluid from losing a substantial amount of heat as the fluid flows through the tube[[]]; and

passing the warmed fluid into the patient via a patient insertion device coupled to the tube.

1213. (Currently Amended) The method of claim 1112, wherein the ~~insulated~~ tube comprises ~~has a configuration selected from the group consisting of:~~

A)——an outer wall, an inner wall, and a fluid lumen, wherein an annular insulating gap is positioned between the outer wall and the inner wall, and ~~[[a]]~~ wherein the fluid lumen is formed by the inner wall for transporting the warmed fluid[[]].

~~B) — an outer wall, an inner wall that forms a fluid lumen for transporting the warmed fluid, and at least two partitions connected between the inner and outer walls for forming at least two insulating gaps between the inner and outer walls; and~~

~~C) — a single wall configuration wherein a plurality of insulating cavities exist within the wall.~~

1314. (Currently Amended) The method of claim 1213, wherein each the annular insulating gap ~~or each of said cavities~~ is evacuated and sealed so that a vacuum is created in the annular insulating gap(s) ~~or cavities~~.

1415. (Currently Amended) The method of claim 1213, wherein each the annular insulating gap ~~or each of said cavities~~ is filled with an insulating material.

1516. (Currently Amended) The method of claim 1415, wherein the insulating material is comprised primarily of air.

1617. (Currently Amended) The method of claim 1415, wherein the insulating material comprises insulating foam.

1718. (Currently Amended) The method of claim 2713, wherein there are only two partitions and the partitions are spaced about 180 degrees apart from each other.

1819. (Currently Amended) A fluid administration set ~~for use with the fluid warming and infusion system of claim 1,~~ comprising:

a heat exchanger cassette having an input port and an output port;

a fluid line ~~having~~ comprising a first end and a second end, the first end ~~being~~ configured to attach to an output port of a fluid container and the second end configured to being in fluid communication with the input port of the cassette; and

a patient line ~~having~~ comprising a first end and a second end, the first end being in fluid communication with the output port of the cassette, wherein the patient line comprises a tube having an integral ~~a substantially thermally insulating component that~~ the tube being disposed external to the patient and being configured to prevent[[s]] a warmed fluid from losing a substantial amount of heat as the warmed fluid flows through the tube, wherein the second end is configured to attach to a patient insertion device disposed in the patient.

1920. The fluid administration set of claim 1819, wherein the ~~insulated tube comprises~~ has a configuration selected from the group consisting of:

A)——an outer wall, an inner wall, and a fluid lumen, wherein an annular insulating gap is positioned between the outer wall and the inner wall, and ~~[[a]]~~wherein the fluid lumen is formed by the inner wall for transporting the warmed fluid[[;]].

B)——~~an outer wall, an inner wall that forms a fluid lumen for transporting the warmed fluid, and at least two partitions connected between the inner and outer walls for forming at least two insulating gaps between the inner and outer walls; and~~

C)——~~a single wall configuration wherein a plurality of insulating cavities exist within the wall.~~

2021. (Currently Amended) The fluid administration set of claim 1920, wherein ~~each the~~ annular insulating gap ~~or each of said cavities~~ is evacuated and sealed so that a vacuum is created in the annular insulating gap(s) ~~or cavities~~.

2122. (Currently Amended) The fluid administration set of claim 1920, wherein ~~each the~~ annular insulating gap ~~or each of said cavities~~ is filled with an insulating material.

2223. (Currently Amended) The fluid administration set of claim 2122, wherein the insulating material is comprised primarily of air.

2324. (Currently Amended) The fluid administration set of claim 2122, wherein the insulating material comprises insulating foam.

2425. (Currently Amended) The fluid administration set of claim 2920, wherein there are only two partitions and the partitions are spaced about 180 degrees apart from each other.

25. (New) The fluid warming and infusion system of claim 1, wherein the tube comprises an outer wall, an inner wall that forms a fluid lumen configured to transport the warmed fluid, and at least two partitions connected between the inner and outer walls to form at least two insulating gaps between the inner and outer walls.

26. (New) The fluid warming and infusion system of claim 1, wherein the tube comprises a single wall configuration wherein the single wall comprises a plurality of insulating cavities therein.

27. (New) The method of claim 11, wherein the tube comprises an outer wall, an inner wall that forms a fluid lumen configured to transport the warmed fluid, and at least two partitions connected between the inner and outer walls to form at least two insulating gaps between the inner and outer walls.

28. (New) The method of claim 11, wherein the tube comprises a single wall configuration wherein the single wall comprises a plurality of insulating cavities therein.

29. (New) The fluid administration set of claim 18, wherein the tube comprises an outer wall, an inner wall that forms a fluid lumen configured to transport the warmed fluid, and at least two partitions connected between the inner and outer walls to form at least two insulating gaps between the inner and outer walls.

30. (New) The fluid administration set of claim 18, wherein the tube comprises a single wall configuration wherein the single wall comprises a plurality of insulating cavities therein.

31. (New) A method of infusing a patient with warmed fluid comprising:
passing a warmed fluid through a tube having insulation integrated into the tube, wherein a first end of the tube is coupled to a source of warmed fluid and a second end of the tube is coupled to a patient insertion device disposed in the patient.

32. (New) The method of claim 31, wherein the tube comprises an insulating material comprised primarily of air.

33. (New) The method of claim 31, wherein the tube comprises an insulating material comprised of insulating foam.